IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
SAN ANTONIO DIVISION

FORTNA SYSTEMS, INC.,	§	
	§	
PLAINTIFF	§	
	§	
V.	§	NO. 5:24-CV-1274 OLG-HJB
	§	
PLUS ONE ROBOTICS, INC.,	§	**JURY TRIAL DEMANDED**
	§	
DEFENDANT	§	

PLAINTIFF'S OPENING CLAIM CONSTRUCTIONS BRIEF

Pursuant to the Scheduling Order (Doc. 40), Plaintiff Fortna Systems, Inc. ("Fortna") submits this Opening Claim Construction Brief regarding the disputed claim terms in U.S. Patent Nos. 11,753,256 (the "'256 Pat.") and 12,059,803 (the "'803 Pat."; collectively with the '256 Pat., the "Patents-in-Suit").

I.   INTRODUCTION

Fortna's proposed constructions are supported by the intrinsic record and extrinsic evidence. Plus One's constructions and positions either are not consistent with the intrinsic record; attempt to improperly introduce limitations; or incorrectly alleged terms are subject to 35 U.S.C. § 112(f) or indefiniteness.

II.   BACKGROUND OF THE INVENTIONS

Fortna alleges Plus One, through its InductOne: A Dual-Arm Automated Parcel Induction Solution to Maximize Throughput, infringes certain claims of the Patents-in-Suit. As described in the Patents-in-Suit generally, although there are unique elements to each separate claim, the claimed systems all relate to the handling of parcels within a sorting or similar facility. The systems involve using a combination of conveyors, multiple robot singulators, and vision and control subsystems to transfer parcels from a "bulk flow" (i.e. parcels randomly positioned on a conveyor) into a "singulated stream" (i.e. in a single file line). *See generally* Patents-in-Suit. The principal problem solved is how to increase the rate of singulating the bulk flow. The rate of singulation is generally referred to as the "parcel throughput rate." When first introduced into the system, the parcels are in bulk flow. As the parcels traverse the sorting facility, the first step in the process is to transform the bulk flow into a singulated stream of parcels in which the parcels are positioned at substantially equal intervals and aligned. The singulated stream is then processed through the rest of the facility.

The singulation occurs where robot singulators (i.e., robots) manually pick up single parcels from the pick area and place the parcels on the place area. The claimed inventions improve upon the use of a single robot or to singulate the parcels and instead, use two or more robots. According to the Patents-in-Suit, using two robots increased the throughput rate (which is determined as the time of placing the singulated parcels on the place area conveyors) by approximately 25% as compared to using a single robot.

II.   LEGAL STANDARD

The purpose of claim construction is to "give effect to the terms chosen by the patentee," not to "rewrite claims." *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999). The "objective baseline" from which to begin claim construction is to inquire "how a person of ordinary skill in the art understands a claim term." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*); *see also Markman v. Westview Instruments*, 517 U.S. 370, 373 (1996). "If a claim term is nontechnical, is in plain English, and derives no special meaning from the patent and its prosecution history, then the court need not function as a thesaurus." Patent Case Management Judicial Guide, § 5.1.4.3, at 5-29 (3d ed. 2016). Courts are not required to supply a construction differing from the language of the term itself. The Court may simply state that the plain meaning of the term applies. *Mentor H/S, Inc. v. Med. Device Alliance, Inc.,* 244 F.3d 1365, 1380 (Fed. Cir. 2001).

Courts generally assign meaning to claim terms "according to the customary understanding of a person of ordinary skill in the art who reads them in the context of the intrinsic record," including the claims, specification, and prosecution history. *Agilent Techs., Inc. v. Affymetrix, Inc.*, 567 F.3d 1366, 1376 (Fed. Cir. 2009). "Properly viewed, the 'ordinary meaning' of a claim term is its meaning to the ordinary artisan after reading the entire patent." *Phillips*, 415 F.3d at 1321.

"There is a heavy presumption that claim terms are to be given their ordinary and customary meaning." *Aventis Pharm. Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013).

"Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy." *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). Claim construction is necessary to give meaning to claim terms, not to resolve the underlying questions of liability. *See Am. Piledriving Equip., Inc. v. Geoquip, Inc.*, 637 F.3d 1324, 1331 (Fed. Cir. 2011).

"Where the perspective of a person having ordinary skill in the art would add nothing to the analysis, there may be no need to construe the terms." Patent Case Management Judicial Guide, § 5.2.3.1.2, at 5-45. Nontechnical terms may not require construal by the Court. *Id.*, § 5.1.4.3, at 5-29. Where "construing" a claim term would involve simply substituting a synonym for the claim term, it is appropriate to allow the claim language to speak for itself. *See C.R. Bard v. U.S. Surgical Corp.*, 388 F.3d 858, 863 (Fed. Cir. 2004).

A patent claim may be expressed using functional language. *See* 35 U.S.C. § 112(f); *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347–49 & n.3 (Fed. Cir. 2015). Section 112(f) provides that a patent applicant may express "[a]n element in a claim" as "a means or step for performing a specified function without the recital of structure, material or acts in support thereof." However, § 112(f) further states the claim will be construed to cover only "the corresponding structure, material, or acts described in the specification and equivalents thereof."

The § 112(f) analysis consists of two steps. *See Dyfan, LLC v. Target Corp.*, 28 F.4th 1360, 1365 (Fed. Cir. 2022). The first step is to determine whether a claim limitation is drafted in means-plus-function format such that § 112(f) applies. *See id.* In making that determination, the Federal

Circuit has "long recognized the importance of the presence or absence of the word 'means.'" *Williamson*, 792 F.3d at 1348. In the absence of the word means, there is a rebuttal presumption that a claim limitation is not subject to § 112(f). *Id*. The presumption stands or falls according to whether one of ordinary skill in the art would understand the claim with the functional language, in the context of the entire specification, to denote sufficiently definite structure or acts for performing the function. *See Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1372 (Fed. Cir. 2015); *Williamson*, 792 F.3d at 1349; *Masco Corp. v. U.S.*, 303 F.3d 1316, 1326 (Fed. Cir. 2002).

Intrinsic evidence, such as the claims themselves and the prosecution history, can be informative in determining whether the disputed claim language recites sufficiently definite structure or was intended to invoke § 112(f). *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1299 (Fed. Cir. 2014). Because this inquiry turns on the understanding of a person of ordinary skill in the art, the Court may look to extrinsic evidence when determining whether a disputed limitation would have connoted structure to a person of ordinary skill. *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1320 (Fed. Cir. 2004). In cases where it is clear that a claim term itself connotes some structure to a person of ordinary skill in the art, "the presumption that § 112 [(f)] does not apply is determinative" in the absence of "more compelling evidence of the understanding of one of ordinary skill in the art." *Apex Inc. v. Raritan Comput., Inc.*, 325 F.3d 1364, 1373 (Fed. Cir. 2003).

If the limitation fails to recite sufficiently definite structure or acts, then § 112(f) applies and the Court moves to step two of the analysis. At the second step, the Court determines whether the specification discloses structure or acts that "corresponds to the claimed function." *Williamson*, 792 F.3d at 1351. A "structure disclosed in the specification is 'corresponding' structure only if

the specification or prosecution history clearly links or associates that structure to the function recited in the claim." *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). A "structure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim." *Id*. If there is no identifiable "corresponding structure, material, or acts described in the specification," the claim term is indefinite. *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1312 (Fed. Cir. 2012). For § 112(f) limitations implemented by a programmed general purpose computer or microprocessor, the corresponding structure described in the patent specification must include an algorithm for performing the function. *WMS Gaming Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). An algorithm may be expressed "in any understandable terms including as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure." *Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1385 (Fed. Circ. 2011). Even described "in prose," an algorithm is still "a step-by-step procedure for accomplishing a given result." *Id*. at 1385. "[A] patent need only disclose sufficient structure for a person of skill in the field to provide an operative software program for the specified function." *Id*.

A claim is indefinite only if it fails to give a person of ordinary skill in the art reasonable certainty as to its meaning. *See Nautilus, Inc. v. Biosig Instru., Inc.*, 572 U.S. 898, 910 (2014). "Of course, claims are not indefinite merely because they present a difficult task of claim construction." *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008) (overruled on other grounds).

Courts have held that "the weight of the jurisprudence disfavors indefiniteness determinations at the *Markman* stage of patent litigation." *ConocoPhillips Co. v. In-Depth Compressive Seismic, Inc.*, No. CV H-18-0803, 2019 WL 1877374, at *17 (S.D. Tex. Apr. 26,

2019). "'Several principles mitigate against ruling on indefiniteness at the *Markman* stage: first, the high burden of proof on the party challenging a patent claim for indefiniteness; second, the fact that a claim is not indefinite merely because the parties dispute its meaning; and finally, the dispositive effect of a ruling on indefiniteness, which invalidates the claim entirely.'" *Id.* (quoting *CSB-System International Inc. v. SAP America, Inc.*, 2011 WL 3240838 at *20 & n.16 (E.D. Pa. July 28, 2011)).

III.   ARGUMENT

A.   PERSON OF ORDINARY SKILL IN THE ART

Here, Fortna contends a person of ordinary skill in the art ("POSITA") would have: at least a Bachelor of Science in an engineering-related field such as mechanical, electrical, computer, or industrial engineering and (b) two or more years of practical experience with systems involved in the singulation of objects using robotic means. Lack of work experience can be remedied by additional education, and vice versa. Declaration of Dr. Jason Janét ("Janét") attached hereto as Ex. A ¶17.

B.   TERMS AT ISSUE

1.   "positioned downstream of" (All asserted claims)

Fortna	Plus One
"at a location where a process or processes occurring later in a sequence takes place"	"Located after the physical end of, and along the same linear flow of parcels as,"[1]

Fortna's construction of "positioned downstream of" accounts for both the physical location and timing related components of the flow of parcels in the system in a downstream

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[1] Plus One's construction is different than what it said was the only possible construction in its Motion to Dismiss and Objection to Report and Recommendation, where it argued that "positioned downstream of" had to mean "physically positioned in-line and forward."

direction. This is consistent with the intrinsic record, extrinsic evidence, and what would be understood by a POSITA in view of the specification and claimed inventions.

The term "downstream" is not unique in or to engineering. Janét ¶59. For example, the Federal Circuit has confirmed the construction of "downstream" in the context of data to signal the channel or direction in which the data is traveling. *Rosetta-Wireless Corp. v. Samsung Elec. Co., Ltd*, 764 F. App'x 881, 887 (Fed. Cir. 2019). Dictionaries support similar meanings of "downstream." Merriam-Webster's Online Dictionary offers the following as a definition of "downstream": "in or toward the latter stages of a usually industrial process or the stages (such as marketing) after manufacture." Docket No. 22 at A-3. This is consistent with the other dictionaries, namely, THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (5th ed. 2022) ("At a later point in a production process or supply chain.")(Janét ¶59, Ex. 2; Declaration of Samuel Miller, attached hereto as Ex. B, Ex. 2); MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY (11th ed. 2003) ("[I]n or toward the latter stages of a usu. industrial process.")(Janét ¶59, Ex. 3; Miller, Ex. 3); OXFORD ENGLISH DICTIONARY ("[I]n or to[ward] the later stages of any industrial, manufacturing, or commercial process.")(Janét ¶59, Ex. 4; Miller, Ex. 4); CAMBRIDGE DICTIONARY ("[U]sed to describe something that happens later in a process   or   series   of   events.") (https://dictionary.cambridge.org/dictionary/english/downstream)(Janét ¶59, Ex. 5; Miller, Ex. 5).

The same directional relationship applies to the language of the Patents-in-Suit. Janét ¶60. "Positioned downstream of" in the context of the type of systems at issue generally refers to the flow of packages or items through the processes or stages of the system. *Id.* ¶61. The Patents-in-Suit describe sortation systems in which parcels are coming from one direction and going in another direction in a choreographed sequence. *Id.* At a high level, "In a sorting facility for parcels,

parcels are unloaded from trucks or other vehicles at unloading locations, sorted, and then loaded onto trucks or other vehicles for delivery to the intended recipients." '256 Pat. 1:19-22; '803 Pat. 1:23-27.

At any given point in time, parcels in the sortation process are traveling from upstream (earlier) process locations to downstream (later) process locations. Janét ¶62.The specification is replete with examples of the directional flow. *Id*. For example, the pick conveyer may receive bulk flow of parcels from an "upstream conveyor" which then may be singulated by a robot that places the singulated parcel on a place conveyor that flows to a "downstream conveyor" 520 or 522. '256 Pat. 20:16-24; '803 Pat. 20:43-51. As another example, "In some embodiments, the system includes an upstream conveyor configured to receive and convey a bulk flow of parcels downstream toward the pick area." '256 Pat. 3:29-31; '803 Pat. 3:33-35. Further, "In some embodiments, the target camera is positioned so that the field of view of the target camera includes the pick area as well as at least a portion of the pick conveyor located upstream of the pick area…and, in some embodiments, the proximity of such parcels relative to each other and/or the position of one or more parcels located upstream of the pick area." '256 Pat. 2:13-21; '803 Pat. 2:15-19. In addition, "In some embodiments, the system includes an upstream conveyor configured to receive and convey a bulk flow of parcels downstream toward the pick area." '256 Pat. 3:29-31;'803 Pat. 3:33-35. "In some embodiments, the parcel transfer routine includes a parcel pick and index subroutine that is selectively executed to reduce system downtime associated with the transfer of parcels positioned upstream of the pick area of the pick conveyor to the pick area." '256 Pat. 2:60-64; '803 Pat. 2:63-67. Finally, "Non-singulated parcels may then interfere with subsequent processing, including downstream sorting." '256 Pat. 1:39-40; '803 Pat. 1:43-44.

In light of the intrinsic record and the technology at issue, a POSITA would understand and agree with Fortna's construction of "positioned downstream of" to mean "at a location where a process or processes occurring later in a sequence takes place" Janét ¶¶ 57, 63. That the Patents-in-Suit disclose and a POSITA would understand "positioned downstream of" to mean Fortna's construction is supported by Plus One's own public filings. Plus One's patent applications use "downstream" in a manner consistent with Fortna's construction.

In U.S. Patent Application 2024/0217756 A1 (the "'756 Application") (Doc. 22 at Ex A-1), Plus One describes in figures and words what Fortna believes is the accused product at issue in this case. Janét ¶64. For a general overview of the claimed system in the '756 Application, Plus One states,

> As a general overview, robot(s) **206** operate to pick objects from one conveyor **205** and move the objects to another conveyor **205**. Control system **203** coordinates the movement of conveyors **205** to move objects through the system *towards a downstream* induction destination.

'756 Application at [0025] (emphasis added). Figure 5 of the '756 Application depicts a system 500 that begins with an in-feed conveyor 550 that flows to two pick area conveyors 520 and 530 where two robots 522 and 532 move packages on place area conveyors 524 and 534 that run parallel to the two pick area conveyors 520 and 530. *Id.* The place area conveyers 524 and 534 then flow to the induction conveyor 540. In the written description of Figure 5 of the '756 Application, Plus One describes that one of ordinary skill in the art would know that the components of the system 500 beginning with the in-feed conveyor 550 and ending with the induction conveyor 540 could be rearranged and their "orientation modified without departing from the scope of the invention." Ex. A-1 at [0078]; *Id*. Such rearrangement and change in orientation "would fall within the scope of the invention and would generally follow the same *principle of moving objects downstream, i.e. from in-feed conveyor 550 towards the induction*

conveyor 540." *Id*. (emphasis added). This means that under the embodiment described in Figure 5, Plus One's system moves parcels *downstream* from the infeed conveyor 550 through pick area conveyors 520 and 530 to place area conveyors 524 and 534 via robotic movements to induction conveyors 540. *Id.* By its own admission in the '756 Application, the pick area conveyors are positioned downstream of the place area conveyers even if they are positioned "side-by-side."[2]

Plus One's International Application Publication Number WO 2024/145692 A1 (the "'692 Application") (Doc. 22 at Ex. A-2) similarly describes the flow of the Accused System downstream. Janét ¶65. In the '692 Application, Plus One states

> As a general overview, robot(s) 206 operate to pick objects from one conveyor 205 and move the objects to another conveyor 205. Control system 203 coordinates the movement of conveyors 205 to move objects through the system towards a downstream induction destination.

'692 Application at [025]. The '692 Application shares the same Figure 5 and description of Figure 5 with the '756 Application including the reference to following the "principle of moving objects downstream, *i.e.* from in-feed conveyor 550 towards the induction conveyor 540." Ex. A-2 at [078]. Accordingly, Plus One has admitted in multiple domestic and international filings that the Accused Product has pick area conveyors that are positioned downstream of the place area conveyors even if they are positioned side-by-side. *Id.*

2.   "a picking area" (All asserted claims)

Fortna	Plus One
No construction necessary; if necessary, plain and ordinary meaning	"a predetermined region of interest within the conveying surface of a conveyor, from which region a first robot singulator and a second robot singulator are configured to cooperatively pick and transfer parcels"

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[2] Plus One never uses the phrase "side-by-side" in the '756 Application.

The claim term "a picking area" is plain and unambiguous such that no construction is necessary. The term is used consistently throughout the claims, specification, and prosecution history in the context of an area where something (*e.g.* a parcel) is picked. A POSITA would understand the claim term "a picking area" and as such, no construction is required or, alternatively, the claim term should be given its plain and ordinary meaning. *See* Janét ¶66.

The "picking area" according to the intrinsic record is nothing more than any area(s) where parcels can be "picked" – *i.e.* parcels are engaged and transferred from by the first robot singulator or the second robot singulator. Janét ¶68. The "picking area" could include areas, including but not limited to, "any form of chute, conveyor, or conveying surface, whether static or moving." '256 Pat. 4:55-61; '803 Pat. 21:8-15. This is consistent with what a POSITA would understand.

3.   "instructions which cause the pick conveyor to index a predetermined distance" ('256 Pat.: 1)/"instructions…to…index the pick conveyor a predetermined distance" ('256 Pat.: 18)

Fortna	Plus One
"instructions which cause the pick conveyor to index a distance that is determined prior to the communication of such instructions to the pick conveyor"	"Subject to Section 112(f). Indefinite, otherwise limited to instructions that implement the steps as shown in FIG. 11. Alternatively, 'instructions that cause the conveying surface of the pick conveyor to advance by a distance that is calculated prior to such advancing using image data acquired by the first camera'"

Although Fortna is addressing the terms together, as a preliminary matter, Fortna objects to the inclusion of the term "instructions…to…index the pick conveyor a predetermined distance" (as shown in Claim 18 of the '256 Pat.) being part of this claim construction proceeding. Plus One did not disclose this term on or before July 7, 2025, as required by the Scheduling Order (and extended deadline for such disclosure agreed to by the parties), and the number of terms proposed

by Plus One exceeds ten if that term is included. Miller ¶ 2, Ex. 1. If the Court overrules the objection, then both terms should be construed the same.

The "instructions" term is not drafted in means-plus-function format such that § 112(f) applies. Plus One bears the burden to rebut this presumption, which cannot be done. A POSITA would understand the claim language, in the context of the entire specification, to denote sufficiently definite structure or acts. Janét ¶73.

The "instructions" terms correspond to the software-implemented control step that is executed by the controller 40. '256 Pat. 22:29-49, 26:47-64; Janét ¶71. The control step is described in detail in the '256 Pat. *Id.* For example, within the exemplary pick-and-index subroutine (shown in part in Fig. 11 and corresponding to Fig. 7), the flow is to calculate the total distance d that the pick conveyor 14 must move so that a parcel upstream (such as parcel 50d in Fig. 10) enters the picking area 15 after the parcel currently being picked has been removed from the picking area. *Id*. 17:8-18:59, Fig. 7, Fig. 10 at *d*, and Fig. 11 at steps 198-212; Janét ¶71. The distance is calculated prior to the movement by the conveyor. '256 Pat. 17:24-28; Janét ¶71. "As the calculated distance is determined prior to indexing the pick conveyor 14 to move the upstream parcel into the picking area 15, the calculated distance may also be characterized as a 'predetermined distance." '256 Pat. 17:24-28; Janét ¶71. The "instructions" terms are the final step in the subroutine, namely, the controller-transmitted command to move the pick conveyor by the predetermined distance d after a pick event that results in the conveyor indexing the calculated distance to bring any next parcel into the picking area after the removal by the robot singulator of the parcel in the picking area. *Id*. at ¶72.

Even if the Court determines § 112(f) applies, the specification discloses structure or acts that "corresponds to the claimed function." *Id*. ¶ 73. As described above, the claim itself and the

specification disclose the function of calculating a distance d and then a command that the pick conveyor index by that distance d. *Id*. Accordingly, in light of the claims and specification, the "instructions" term is not indefinite. *Id*.

Assuming Plus One's § 112(f) and indefiniteness arguments fail, Fortna's construction is closely supported by the intrinsic record without importing limitations from exemplary embodiments. Plus One's attempt to import additional limitations is improper. *See Phillips*, 415 F.3d at 1323 ("[W]e have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.") (citing *Gemstar–TV Guide Int'l, Inc. v. Int'l Trade Comm.*, 383 F.3d 1352, 1366 (Fed. Cir. 2004)). "Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using 'words or expressions of manifest exclusion or restriction.'" *Liebel–Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (quoting *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002)). The '256 Pat. is clear that "in *some* embodiments, the calculated distance is based on image data corresponding to an image acquired by the target camera." '256 Pat. 3:3-5 (emphasis added). It does not state in all embodiments.

4. "immediately following removal of another parcel" ('256 Pat.: 1, 18)

Fortna	Plus One
"Substantially simultaneously with removal of another parcel"	"in response to, and at substantially the same time as, a parcel being removed by a robotic singulator"

Fortna's construction is consistent with the intrinsic evidence. Janét ¶¶75, 77. In fact, "immediately following" is self-defined in the '256 Pat. *Id*. ¶77. The specification states in pertinent part, "the pick and index subroutine reduces such downtime by causing the pick conveyor

to be indexed a calculated distance to move a parcel located upstream of the picking area into the picking area immediately following *(i.e. substantially simultaneously with)* another parcel being removed from the picking area by either the first robot or the second robot." '256 Pat. 2:64-3:3 (emphasis added); Janét ¶77 In the specification, in referenced to Figs. 7, 9, and 11, the system 10 is described to include the movement of parcels located upstream of the picking area 15 into the picking area 15 "immediately following (i.e. *substantially simultaneously with*) another parcel (e.g., parcel 50 c in FIG. 10) being removed from the picking area 15 by either the first robot 20 or the second robot 22." '256 Pat. 17:11-24 (emphasis added); Janét ¶77.

> 5. **"instructions . . . which cause the first robot singulator and the second robot singulator to successively engage and transfer parcels" ('256 Pat.: 1, 13, 18)**

Fortna	Plus One
": instructions which cause the first robot singulator and the second robot singulator to perform operations that result in parcels of the bulk flow positioned in the picking area being transferred one after another to the place area of the place conveyor"	"Subject to Section 112(f). Indefinite. Alternatively, 'instructions that, relying on image data acquired by one or more cameras with a shared view of the entire picking area and any parcels therein, cause a first robot singulator and a second robot singulator to take turns to cooperatively transfer the parcels in the picking area."

This "instructions" term is not drafted in means-plus-function format such that § 112(f) applies. Plus One bears the burden to rebut this presumption, which cannot be done. A POSITA would understand the claim language, in the context of the entire specification, to denote sufficiently definite structure or acts. Janét ¶80.

This "instructions" term corresponds to a software-implemented control step that is executed by the controller 40. '256 Pat.: 22:29-38, 25:7-17, 26:47-58; Janét ¶81 The control step is described in detail in the '256 Pat. Janét ¶81. For example, the '256 Pat. discloses embodiments in which a routine for engaging and transferring parcels shown in Fig. 7, a robot selection subroutine is executed by the controller 40 "to determine which robot of the first robot 20 and the

second robot 22 should be selected for parcel transfer and which parcel should be transferred by the selected robot in instances where multiple parcels are located in the picking area 15 at a given time." '256 Pat. 2:39-53 11:21-34, Fig. 7; Janét ¶81. The selections resulting from execution of the robot selection subroutine can be based on which of the first of the first robot and the second robot are assigned priority of to engage a parcel at a given time (based on the entries present within a priority queue), the availability of the robot with priority, and/or robot proximity to a parcel for transfer. '256 Pat. 11:15 to 12:38, Fig. 7 at steps 126-134; Janét ¶81.

Following execution of the robot selection subroutine, the controller 40 communicates instructions which cause the selected robot to engage and transfer the selected parcel to the place conveyor. '256 Pat. 12: 54-60, Fig. 7 at steps 136 & 138; Janét ¶82. The '256 Pat. makes clear that the exemplary routine for engaging and transferring parcels shown in Fig. 7 can be repeated to transport any remaining parcels in need of transport to the place conveyor. '256 Pat. 16:47-50; Janét ¶82. Thus, the "instructions" are the final step in an iteration of the routine for engaging and transferring parcels, namely, the controller-transmitted command which cause the first robot singulator and the second robot singulator to engage and transfer parcels in the picking area to the place conveyor. *Id*. Each iteration of the exemplary routine for engaging and transferring parcels involves a selected robot transferring a select parcel to the place conveyor. *Id*. Multiple iterations of such routine thus results in multiple parcels being transferred one after another (i.e., successively) to the place conveyor. *Id*.

Even if the Court determines § 112(f) applies, the specification discloses structures or acts that "correspond to the claimed function." *Id*. ¶83. The specification and drawings disclose the function of a controller communicating instructions which cause the first robot singulator and the

second robot singulator to successively engage and transfer parcels. *Id*. Accordingly, in light of the specification and drawings, this "instructions" term is not indefinite. *Id*.

Assuming Plus One's § 112(f) and indefiniteness arguments fail, Fortna's construction is closely supported by the intrinsic record without importing limitations from exemplary embodiments. *Id*. ¶84. However, in the event the robot with priority is busy or otherwise unavailable to transfer a parcel to the place conveyor 16, the controller 40 will assess whether the robot without priority is available to transfer the parcel and instead select that robot to effectuate transfer of the parcel, provided the robot without priority is not busy or otherwise available. *Id*.

6.   **"first camera" ('256 Pat.: 1, 13, 18; '803 Pat.: 1 and 10)**

Fortna	Plus One
Plain and ordinary meaning; if construction required then, "one or more cameras oriented toward a picking area or picking area and a portion of the pick conveyor located upstream of the picking area"	"one or more cameras having a shared view of the entire picking area and any parcels therein"

The above claim term is plain and unambiguous such that no construction is necessary. The term is used consistently throughout the claims, specification, and prosecution history in the context of identifying a component of the system. A POSITA would understand the claim term and as such, no construction is required or, alternatively, the claim term should be given its plain and ordinary meaning. Janét ¶85.

To the extent construction is necessary, the Court should adopt Fortna's construction because it is consistent with the intrinsic record. '256 Pat. 2:9-26; Janét ¶87. In some embodiments, "The vision and control subsystem includes a first (or target) camera configured to acquire one or more images of a predetermined region of interest (i.e., the picking area) and any parcels located therein." '256 Pat. 9-12; Janét ¶87. In other embodiments, "the target camera is positioned so that that the field of view of the target camera includes the picking area as well as at least a portion of

the pick conveyor located upstream of the picking area." '256 Pat. 12-16; Janét ¶87. Moreover, "Each image acquired by the target camera is processed within the vision and control subsystem to determine the location of parcels positioned within the picking area, if any, and, in some embodiments, the proximity of such parcels relative to each other and/or the position of one or more parcels located upstream of the picking area." '256 Pat. 16-21; Janét ¶87.

7.   **"instructions…to receive and process image data" ('256 Pat.: 1, 13, 18; '803 Pat.: 1, 10)**

Fortna	Plus One
No construction necessary. Alternatively, plain and ordinary meaning.	"Subject to 112(f). Indefinite, otherwise limited to instructions that implement the steps as shown in FIGs. 7 and 11."

The above claim term is plain and unambiguous such that no construction is necessary. The term is used consistently throughout the claims, specification, and prosecution history in the context of identifying a component of the system. A POSITA would understand the claim term and as such, no construction is required or, alternatively, the claim term should be given its plain and ordinary meaning. Janét ¶88.

This "instructions" term is not drafted in means-plus-function format such that § 112(f) applies. Janét ¶89. Plus One bears the burden to rebut this presumption, which cannot be done. This "instructions" term within the context of the asserted claims of the Patents-In-Suit corresponds to an operation performed by the controller 40 in which image data is received and analyzed by the controller 40 to identify characteristics of parcels represented in the image data, such as the location of parcels positioned in the picking area. '256 Pat. 5: 12-25; '803 Pat. 5:24-27; Janét ¶89. "In some embodiments, the proximity of multiple parcels located within the picking area 15 at a given time relative to each other and/or the distance of parcels located upstream of the picking area 15 may also be assessed using an image acquired by the target camera 34 . . . ." '256

Pat.: 15-20; '803 Pat. : 5:27-32; Janét ¶89. The receipt and processing of image data to identify object location within an environment and object location relative to an area or other object represented in the image data are well-understood in the field of computer vision. *Id.* A POSITA would thus understand the claim language, in the context of the entire specification, to denote sufficiently definite structure or acts. *Id*. Accordingly, the present term is neither a means-plus-function term subject to § 112(f) interpretation nor indefinite. *Id*.

District courts are not required to construe every limitation present in a patents asserted claims; rather, claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary explain what the patentee covered by the claims. *See O2 Micron Intern. Ltd. v. Beyond Innovation Technology Co., Ltd*. 521 F.3d 1351, 1362 (Fed. Cir. 2008). As a POSITA would understand the present term in the context of the entire specification to denote sufficiently definite structure or acts, there is no dispute in meaning or technical scope. Janét ¶89. As such, no construction is required.

8. "aligned with" ('803 Pat.: Claims 4, 12)

Fortna	Plus One
Applicable claims not asserted; not indefinite	"Indefinite."

Fortna elected not to assert Claims 4 and 12 against the accused system so construction of "aligned with" is this issue is moot and construction of this term is unnecessary.

Defendant's assertion that the term "aligned with" is indefinite is incorrect. Under 35 U.S.C. § 112(b), a claim is indefinite only if, when read in light of the specification and prosecution history, the claim "fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). In this regard, "the Supreme Court has recognized that 'absolute precession is unattainable'" and "'[t]he certainty

which the law requires in patents is not greater than is reasonable, having regard to their subject matter.'" *Sonix Tech. Co., Ltd. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017) (quoting *Nautilus* at 910 and *Minerals Separation, Ltd. v. Hyde*, 242 U.S. 261, 270 (1916)).

The intrinsic record provides sufficient clarity for a POSITA to understand the meaning and scope of "aligned with" with reasonable certainty. Janét ¶93. The term is used in the context of physical components whose spatial relationship can be readily understood from the specification and figures of the '803 Pat. *Id.* In the specification, the term "aligned with" is used in connection with the orientation of the picking areas 914a, 914b and the place conveyors 916, 918 in the embodiment shown in Fig. 18. '803 Pat.: 23:63-66, Fig. 18; Janét ¶94. I this embodiment, the specification further indicates that a first picking area 914a and a second picking area 914b are oriented within the system 400 so that parcels within a bulk flow of parcels are delivered in discrete batches to either the first picking area 914a or the second picking area 914b. *Id.* 22:46-56, Fig. 18; Janét ¶94. In connection with this embodiment, "The first robot 20 is configured to engage and transfer parcels from the first picking area 914a to the first place conveyor 916…and the second robot 22 is configured to engage and transfer parcels from the second picking area 914b to the second place conveyor 918", such that the first robot 20 and the second robot 22 pick parcels from separate picking areas and deliver parcels to separate place conveyors. *Id.* 22:56-23:4, Fig. 18; Janét ¶94. As shown in Fig. 18, the first picking area 914a is thus arranged relative to the first place conveyor 916, such that the place area of the first place conveyor 916 is positioned in front of the first picking area 914a in the direction which parcels are transferred by the first robot 20, and the distance the first robot 20 travels to transfer such parcels is reduced. *Id.* The second picking area 914b is similarly arranged relative to the place area of the place conveyor 918 to reduce the distance traveled by the second robot 22. '803 Pat. Fig. 18; Janét ¶94.

A POSITA informed by the teachings of the '803 Pat. would appreciate with at least a reasonable degree of certainty the scope of the term "aligned with" as recited in the asserted claims. Janét ¶95. Specifically, a POSITA would appreciate the term as referring to the first picking area and the second picking area being arranged relative to the first place conveyor and the second place conveyor, respectively, as to minimize the distance which the first robot and the second robot must travel. *Id.*; *see also Sonix Tech.* at 1377. The possibilities for achieving such end in a conveyor system consistent with that required in claims 4 and 12 is not unbounded. Janét ¶95. Additionally, at least one court has previously found the term "aligned" to be "straightforward claim language" and definite, even in the absence of explicit clarifying language within the specification. *See, e.g., Fontem Ventures, B.V. v. NJOY, Inc.*, 2015 WL 12781794 at *5-*7 (C.D. Cal. May 7, 2015). Therefore, the term "aligned with" is not indefinite.

Dated: August 8, 2025   Respectfully submitted,

                                                       /s/ Leslie Sara Hyman

                                                       STITES & HARBISON PLLC

                                                       Joel T. Beres (KY Bar No. 84376)
                                                       Admitted pro hac vice
                                                       jberes@stites.com
                                                       400 W. Market Street, Suite 1800
                                                       Louisville, KY 40202
                                                       Telephone: (615) 587-3400

Samuel F. Miller (TN Bar No. 022936)
Admitted pro hac vice
smiller@stites.com
Ann H. Murphy (TN Bar No. 036884)
Admitted pro hac vice
amurphy@stites.com
SunTrust Plaza
401 Commerce Street, Suite 800
Nashville, TN 37219-2490
Telephone: (615) 782-2200

AND

**ROBERTS MARKEL WEINBERG
  BUTLER HAILEY PC**

Elliott S. Cappuccio
Texas State Bar No. 24008419
ecappuccio@rmwbh.com
Leslie Sara Hyman
Texas State Bar No. 00798274
lhyman@rmwbh.com
4630 N. Loop 1604 W, Suite 311
San Antonio, Texas 78249
Telephone: (210) 731-8858

**COUNSEL FOR PLAINTIFF
FORTNA SYSTEMS, INC.**

<u>CERTIFICATE OF SERVICE</u>

I certify that on August 8, 2025, I filed the forgoing PLAINTIFF'S OPENING CLAIM CONSTRUCTIONS BRIEF with the CM/ECF system, which will effect service upon the following:

Matthew C. Powers
mpowers@gdhm.com
Hailey L. Suggs
hsuggs@ghm.com
Graves Dougherty Hearon & Moody, P.C.
401 Congress Avenue, Suite 2700
Austin, Texas 78701

Ryan Tyz
ryan@tyzlaw.com
Udit Sood
udit@tyzlaw.com
Sean Apple
sapple@tyzlaw.com
Tyz Law Group
4 Embarcadero Center, Suite 1400
San Francisco, CA 94111
Telephone: 415.868.6900

<div align="right">

/s/ Leslie Sara Hyman
Leslie Sara Hyman

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